

**ROUND 11 CAPITAL PROJECT NOMINATION FORM**  
**LAKE TAHOE FEDERAL SHARE EIP CAPITAL PROJECTS**  
**APPENDIX K**

<b>Project Name:</b>	SEZ Classification, Inventory, and General Condition Assessment	<b>EIP Number: (Required)</b>	498, 629, 640, 649, 650, 651, 652, 653, 667, 10139, 10151, 10162
<b>Federal Agency Sponsor: (Required)</b>	U.S. Environmental Protection Agency	<b>Contact:</b>	Jacques Landy
<b>Threshold:</b>	Soil Conservation Water Quality Vegetation Wildlife Fisheries Recreation	<b>Phone Number:</b>	(775).589.5248
<b>Threshold Standard:</b>	SC-1, SC-2, WQ-1, WQ-2, WQ-3, WQ-4, WQ-5, WQ-6, V-2, V-3, F-2, W-1, W-2, R-1	<b>Email:</b>	landy.jacques@epa.gov
<b>FUNDING REQUESTED IN THIS ROUND:</b>		\$ 628,560	

**Federal Share EIP Consideration**

Select "yes" or "no" for each question. If you have a "yes" response, briefly describe. **Projects must meet one or more of these 5 items.**

**1. Does the project involve federal land?**

Yes  
☒

No  
☐

**If yes, is the federal land involved important to successful implementation of the project?**

Roughly 80% of the land area within the Tahoe Basin is federally owned. As such, characterization, inventory, and assessment of Stream Environment Zones on federal land would be an integral part of project implementation.

**2. Is this project identified in the EIP? If yes, please ensure the EIP number is identified in the above project information box. If no, provide a description of the projects contribution to the EIP program.**

Yes  
☒

No  
☐

The SEZ classification system, inventory, and general condition assessment that would be outputs from this project would directly support implementation of numerous EIP projects, including but not limited to the following soil conservation, water quality, and general EIP projects: 498, 629, 640, 649, 650, 651, 652, 653, 667, 10139, 10151, 10162. In addition, the outputs from this project would facilitate more informed and effective watershed-based planning of future EIP implementation projects.

**3. Does the project involve the conservation of a federal or regional threatened, rare, endangered, or special interest species?**

Yes  
☒

No  
☐

This project does not directly involve the conservation of a federal or regional threatened, rare, endangered, or special status species. However, the SEZ classification system, inventory, and general condition assessment that would be outputs from this project would significantly improve conservation planning efforts for plant and animal species that utilize SEZs during their life cycles, such as the willow flycatcher, Sierra Nevada yellow-legged frog, and Tahoe yellowcress. In addition, the SEZ inventory and general condition assessment would substantially improve the quality of project-level and programmatic cumulative impacts analyses conducted by EIP partners for compliance with National Environmental Policy Act, California Environmental Quality Act, and Tahoe Regional Planning Agency environmental review requirements.

**4. Does the project involve an identified federal interest such as the detection and eradication of non-native invasive species (aquatic or terrestrial)?  
If yes, identify the species?**

Yes  
☐

No  
☒

**5. Does the project contribute to supporting implementation of capital projects in the EIP? Such projects that fulfill this function would include technical assistance, data management, and/or resource inventories?**

Yes  
☒

No  
☐

The SEZ classification system, inventory, and general condition assessment that would be outputs from this project would directly support the planning and implementation of existing EIP projects (see #2 above). In addition, the proposed outputs from this project would facilitate planning of future EIP and TMDL projects. Watershed habitat improvement is identified as a focus area in the Federal Vision for the Environmental Improvement Program at Lake Tahoe (June 2006), as is the goal of providing programmatic assistance that will advance the capacity and capability of stakeholders to implement the Environmental Improvement Program (EIP). The proposed outputs from this proposed project (SEZ classification system, inventory, and general condition assessment) would directly address the watershed improvement focus area and the goal of providing programmatic assistance by providing EIP partners with planning tools that would facilitate more effective, comprehensive watershed-based habitat conservation and improvement planning. In addition, the proposed project would directly address draft language prepared for the Lake Tahoe Restoration Act reauthorization legislation, which calls for the development of a watershed strategy that includes “a classification system, inventory, and assessment of stream environment zones”.

**Check all Capital Focus Area(s) that apply:**

- ☒ 1. **Watershed and Habitat Improvement**
- ☐ 2. **Forest Health**
- ☐ 3. **Air Quality and Transportation**
- ☐ 4. **Recreation and Scenic**

**Check all that apply (must meet a minimum of one category):**

- ☒ 1. **Continued emphasis on forest ecosystem health/fuels reduction projects considering the LTBMU Stewardship Fireshed Assessment and Lake Tahoe Basin Multi-Jurisdictional Fuels Reduction and Wildfire Prevention Strategy.**
- ☐ 2. **Continued implementation of projects approved in Rounds 5 through 10 which implement the EIP. Project proposal should clearly describe the phase/product being produced along with the consequence of not completing the project phase proposed for Round 10.**

*List Rounds and funding:*

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- ☒ 3. **Project is consistent with and contributes toward TMDL pollutant reductions within the four source categories (atmospheric, urban & groundwater, forested uplands, and stream channel). *NOTE: If “yes”, then please respond to questions in the accomplishments section of the nomination proposal.***
- ☐ 4. **Control of aquatic invasive species and prevention and/or detection of new aquatic invasive species.**

## **Project Nomination Proposal Outline**

### **Project Summary (a brief summary which clearly describes the proposed project –maximum 200 words)**

- Summarize ONLY this Round 11 project.

The Tahoe Basin currently lacks a standardized SEZ classification methodology and an accurate, basinwide inventory and condition assessment, making long term tracking and monitoring efforts, and effective, comprehensive, watershed-based habitat conservation and improvement planning difficult at best. This project proposes to develop a standardized stream environment zone (SEZ) classification system for use in the Tahoe Basin, and to apply this classification scheme on a regional scale using remotely sensed data to generate an accurate, basinwide inventory of SEZ type, distribution, and general condition. These project outputs would be used to facilitate more comprehensive and effective watershed-based planning and implementation of EIP and TMDL projects to achieve multiple environmental threshold benefits, and would provide a framework and contemporary baseline for ongoing tracking and monitoring efforts.

### **Project Description**

#### **Introduction**

- Provide project background which explains the situation and state the problem and how it will be addressed.

***Note:** Focus needs to be the project in Round 11 not a history of an ongoing project or program.*

The Tahoe Basin currently lacks a standardized, systematic SEZ classification methodology and an accurate, contemporary, basinwide inventory and assessment of general condition in the context of the SEZ Threshold (i.e., level of disturbance, development, and subdivision). The absence of these key technical tools makes it difficult to set realistic and appropriate SEZ restoration and enhancement goals and effectively monitor changes in the type, extent, and condition of SEZs in the context of the SEZ Threshold Standard, and it hinders effective, comprehensive watershed-based habitat conservation and improvement planning efforts.

The proposed project will address these deficiencies in the SEZ program and EIP by providing a standardized, systematic classification system for use in the Tahoe Basin and a contemporary inventory of SEZ type, extent and general condition assessment of SEZs that can be used to evaluate past effects on SEZs, to track SEZ type, extent and condition over time, and to evaluate threshold-driven targets for SEZ restoration and enhancement. It will also provide a framework for (i) the development of more comprehensive, watershed-based habitat conservation, restoration, and TMDL project planning and (ii) the development of comprehensive monitoring and assessment methods and strategies. TRPA will be pursuing EPA Wetland Program Development Grant funding for the latter in early 2010, building upon this project, as well as a promising but unsuccessful initial effort to acquire EPA grant funding in 2009.

Although the TRPA SEZ program manager would serve as project lead, development of all proposed project outputs (classification system, inventory, general condition assessment) would be a collaborative effort involving representatives and technical specialists from all of the state and federal regulatory and land management agencies in the Tahoe Basin (see project partnership information below). To the extent possible, the proposed project would draw on existing classification, inventory, and condition assessment information, such as recent inventory and condition assessment information compiled by the Lake Tahoe Basin Management Unit for federal lands in the Tahoe Basin.

The proposed project would not include the development of SEZ identification and delineation criteria. As envisioned by TRPA, review and update of the SEZ definition, identification criteria, and field indicators for delineation would be undertaken as a separate, albeit simultaneous, process. However, field data and information collected during completion of the proposed project would be used to update and refine the existing SEZ definition, identification criteria, and field indicators for delineation.

- Describe what Round 11 is specifically funding; list the number of years the requested funding will cover; briefly describe how this project links into previous and future projects, and identify other round funding.

**NOTE:** *Focus should be on finishing current/phased projects. If project is new in Round 11, clearly identify if the project is for planning or implementation and how it will be completed with Round 11 funds. Identify if Round 12 or other funds will be needed to complete the project. Please identify total non-SNPLMA funds that are being contributed/dedicated to the proposed Round 11 project and the source of those funds.*

As proposed, Round 11 would fund (i) the development and publication of a standardized SEZ classification system and manual for use in the Tahoe Basin, and (ii) development and publication of a remotely sensed, basinwide inventory of SEZ type, distribution, and general condition in the context of the SEZ Threshold Standard (i.e., level of disturbance, development, or subdivision). The requested Round 11 funding would cover the entire period of project work (approximately 3 years). The remotely sensed data sets that would be used to generate the basinwide inventory and general condition assessment have been funded by a Round 10 grant (project number U006). The Tahoe Regional Planning Agency (TRPA) will contribute approximately \$100,000 in matching funds in the form of program manager salary, benefits, and indirect costs.

The project consists of three main tasks: (Task 1) Convene Technical Working Group and Develop Preliminary SEZ Classification System (estimated cost = \$94,600), (2) Develop and Implement Field Sampling Plan and Publish Final SEZ Classification Manual (estimated cost = \$398,960), and (3) Develop and Publish Basinwide Inventory and General Condition Assessment (estimated cost = \$135,000). If funded in full in Round 11, no additional SNPLMA funds or funds from other granting or partner agencies will be required to complete these project tasks.

#### Alternate Funding Approaches

In early 2010, TRPA intends to request funding from EPA's Wetland Program Development Grant program for the development, testing, and adoption of rapid SEZ condition assessment methods in the Tahoe Basin (a separate but complementary project). None of these anticipated condition assessment tasks can be completed very effectively without first developing a standard classification system and basinwide inventory. If scaling or phasing is necessary, Round 11 funds could be used to fund Tasks 1 and 2 (for a total of \$493,560), and TRPA could request additional funds from Round 12 or from the Wetland Program Development Grant program to fund Task 3 (\$135,000). A final, least desirable alternative is that Round 11 only fund Task 1 (\$94,600), in which case Round 12 funding of at least Task 2 (\$398,960) would be needed before requesting EPA funding for the final task. It is unlikely that EPA would be willing to fund Tasks 1 and 2, as these are more likely to be viewed as "region-specific" efforts that won't necessarily advance statewide wetland programs and initiatives. Any level of SNPLMA funding is likely to substantially increase the probability of receiving EPA Wetland Program Development Grant funding.

- Describe the “readiness” of this project to move forward (urgency, capacity, capability, environmental documentation, interagency agreements, etc)

Development of a SEZ classification system, inventory, and general condition assessment is essential for informed, comprehensive, and effective planning and implementation of existing and future EIP and TMDL projects. A testament to the urgent need for these technical work products is the draft language for the Lake Tahoe Restoration Act reauthorization legislation, which directly cites the need for development of a SEZ classification system, inventory, and condition assessment to facilitate the development of watershed-based strategies and priorities for EIP implementation projects.

The timing of other associated EPA Wetland Program Development Grant funding efforts for the SEZ program is such that full or partial funding of this proposed project under SNPLMA Round 11 is rather urgent. It is critical that SNPLMA Round 11 fund at least the first two tasks of this proposed project to leverage further EPA funding of SEZ program development in Lake Tahoe Basin.

Given that the proposed project would take approximately three years to complete, project work should be initiated as soon as possible. The TRPA SEZ Program Manager would serve as project lead, and has allocated sufficient work program resources to fulfill this role and provide technical contributions and expertise throughout the anticipated 3 year duration of the proposed project.

- Describe partnerships for this project. (if applicable, project should identify committed/secured partner funding and/or other partner contributions (describe) and how it is integrated into the project)

The TRPA SEZ Program Manager would serve as project lead. Project implementation will include the formation of a Technical Working Group (TWG) that will provide technical advice and guidance to the project team. It’s anticipated that the TWG will include representatives from all regulatory and land management agencies with a presence in the Tahoe Basin, including but not necessarily limited to the U.S. Department of Agriculture Forest Service and Natural Resources Conservation Service, U.S. Environmental Protection Agency, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, Lahontan Regional Water Quality Control Board , California Department of Fish and Game, and the Nevada Division of Environmental Protection.

State and federal agency staff stationed in the Tahoe Basin would be asked to participate in 8 to 12 TWG meetings, each approximately 4-6 hours in length. In addition, they’d be asked to provide peer review and written comment on draft TWG work products. As would be the case for TRPA staff, state and federal agencies would be asked to provide these services to the TWG as part of their existing work programs; the proposed project budget does not include compensation for TWG participation for state and federal agency staff stationed in the Tahoe Basin. The proposed project budget does, however, include compensation for TWG participation for state and federal agency staff located outside the Tahoe Basin that may be recruited by the TWG to provide specialized expertise not available in the Basin (e.g., Dave Weixelman, USFS). In addition, the proposed project budget also includes compensation for state and federal agency staff that are willing and available to provide services and expertise for non-TWG work tasks (e.g., development and implementation of field sampling plan).

**Note:** The form requests information about project goals, objectives, accomplishments, and questions the program is designed to answer across several different sections. These issues are closely linked and your individual responses should provide a cohesive description.

**Goal – Purpose and Need (“larger” statement of future expected outcome – usually not measurable)**

The goals of the proposed project are as follows:

Goal #1: To develop scientifically sound technical work products that will facilitate informed, comprehensive, and effective watershed-based planning and implementation of habitat conservation, improvement, and management efforts in the Tahoe Basin.

Goal #2: To provide scientifically sound technical work products that will provide the foundation for the development of a comprehensive SEZ Program for the Tahoe Basin that is built around the U.S. Environmental Protection Agency’s four core wetland program elements: (1) a comprehensive SEZ protection and restoration plan, (2) a comprehensive SEZ monitoring and assessment plan, (3) a comprehensive SEZ regulatory strategy and implementation plan, and (4) water quality standards for SEZs.

**Objectives (specific measurable statements of action which when completed will move towards achieving the goal)**

**Note:** Objectives will form the basis for the milestones/deliverables to be identified in Appendix B-8

The objectives of the proposed project are as follows:

Objective #1: To develop and publish a standardized SEZ classification system and manual for the Tahoe Basin.

Object #2: To develop and publish a basinwide inventory of SEZ type, distribution, and general condition (i.e., general level of disturbance, development, and subdivision).

- Describe how fulfilling objectives will contribute to the achievement of one or more environmental thresholds (air quality, water quality, soil conservation, vegetation, fisheries, wildlife, scenic, noise, recreation). Provide measures if applicable. For example: acres treated, miles of stream restored for each objective.

Soil Conservation Thresholds: Fulfilling objectives will (i) provide a framework and contemporary baseline for tracking and monitoring changes in the type, distribution, extent, and condition of SEZs, (ii) facilitate informed, comprehensive, and effective watershed-based planning of SEZ conservation, improvement, and mitigation efforts, and (iii) help to prioritize projects to maximize the effectiveness of EIP project funding. As such, fulfilling project objective will contribute substantially to attainment of the Soil Conservation Threshold Standards for land coverage and SEZ restoration.

Water Quality Thresholds: SEZ conservation, restoration, and enhancement are central to Regional Plan and TMDL strategies for maintaining and improving water quality in the Tahoe Basin. Fulfilling project objectives will provide the technical tools necessary for

informed, comprehensive, and effective watershed-based SEZ conservation and improvement planning efforts, and help to prioritize EIP and TMDL project funding. In doing so, fulfilling project objectives will contribute significantly to attainment of all Water Quality Threshold Standards.

Vegetation Thresholds: Fulfilling project objectives will provide the technical tools necessary for informed, comprehensive, and effective watershed-based SEZ conservation and restoration planning efforts, and will thereby contribute significantly to attainment of the Vegetation Threshold Standards for uncommon plant communities and plant species richness, relative abundance, and pattern.

Wildlife Thresholds: Fulfilling project objectives will provide the technical tools necessary for informed, comprehensive, and effective watershed-based SEZ conservation and restoration planning efforts, and will thereby contribute significantly to attainment of the Wildlife Threshold Standards for wildlife population sites and habitats of special significance.

Fisheries Thresholds: Fulfilling project objectives will provide the technical tools necessary for informed, comprehensive, and effective watershed-based SEZ conservation and restoration planning efforts, and will thereby contribute significantly to attainment of the Fisheries Threshold Standard for stream habitat.

Recreation Thresholds: Fulfilling project objectives will provide the technical tools necessary for informed, comprehensive, and effective watershed-based SEZ conservation and restoration planning efforts, and will thereby contribute significantly to attainment of the Recreation Threshold Standard for high quality recreational experiences in natural areas.

- Describe the estimated environmental risks from unintended consequences of the proposed project (if applicable).

There are no estimated environmental risks or unintended consequences associated with the proposed project.



## Accomplishments

- Describe the anticipated project accomplishments (i.e. products or identifiable environmental benefits being produced or implemented under this project)

*Note: Differentiate between direct and/or primary project effects and secondary and/or overall watershed effects.*

The anticipated project accomplishments are:

- 1- a SEZ classification manual for the Tahoe Basin, published in digital and hardcopy formats; and
- 2- a basinwide SEZ inventory depicting the type, distribution, and general condition of SEZs in the Tahoe Basin, published in both digital and hardcopy formats.

The proposed project has been organized into the three main tasks listed below. These tasks are, however, subject to minor revision during development of the final project work plan.

### Task 1 – Convene Technical Working Group and Develop Preliminary SEZ Classification System

- i. Contract environmental consultants and agency specialists to provide project coordination, meeting facilitation, specialized technical expertise, technical editing, graphical design, and publication services.
- ii. Develop draft and final work plan for development of preliminary and final SEZ classification manual
- iii. Convene Technical Working Group (TWG)
- iv. Compile and review existing wetland and riparian classifications
- v. Prepare draft preliminary SEZ classification manual and circulate for peer review and comment
- vi. Prepare final preliminary SEZ classification manual

### Task 2 – Develop and Implement Field Sampling Plan and Publish Final SEZ Classification Manual

- i. Develop draft and final field sampling plan for the different classes and subclasses of SEZ identified during Task 1
- ii. Implement field sampling plan
- iii. Prepare draft final SEZ classification manual and circulate for peer review and comment
- iv. Prepare and publish final SEZ classification manual

### Task 3 – Develop and Publish Basinwide SEZ Inventory and General Condition Assessment

- i. Contract consultants and agency specialists to provide remote sensing, project coordination, technical writing and editing, graphical design, and publication services.
- ii. Compile and review existing SEZ inventories and condition assessments
- iii. Develop inventory and general condition assessment work plan
- iv. Prepare draft SEZ inventory and general condition assessment
- v. Prepare and publish final SEZ inventory and general condition assessment

- Describe how the project results/accomplishments will be communicated and made available to the public.

All project outputs (SEZ classification manual and SEZ inventory and general condition assessment) would be published in digital and hardcopy formats (including maps), posted to the TRPA and TIIMS websites, distributed to partner agencies and stakeholder groups in the Tahoe Basin, and presented at public meetings and workshops.

- If you checked “yes” for the project being consistent with and contributes to TMDL pollutant reductions please consider and integrate the following in the project description:

- a) Describe whether, and how, the project demonstrates advanced, alternative, or innovative practices.

The proposed SEZ classification system for the Tahoe Basin will draw heavily on contemporary wetland and stream classification methodologies, and the proposed basinwide SEZ inventory and general condition assessment will be prepared using extremely high resolution remote sensing data and advanced automated computer analysis techniques.

- b) If project includes project level monitoring, describe ability of proposed monitoring strategy to contribute to the state of TMDL knowledge. Also describe if purpose of the capital project is to conduct data collection and/or analysis related to Lake Tahoe clarity.

Not applicable - the proposed project would not involve project level monitoring.

- c) Describe treatment approach for reducing pollutants and/or measures to address connectivity between pollutant sources and Lake Tahoe or its tributaries. Identify target pollutants, and, to the degree feasible, provide quantitative estimates of project effectiveness at reducing pollutant loads (and/or a commitment to provide post-project estimates).

Not applicable – the proposed project does not include pollutant reduction measures

- d) If appropriate, describe whether, and how, the project can be combined or coordinated with other TMDL implementation projects.

The proposed project cannot be combined with other TMDL implementation projects. However, the proposed project outputs (SEZ classification system, inventory, and general condition assessment) would be of great value in prioritizing, coordinating, and maximizing the effectiveness of TMDL implementation projects, especially those involving SEZ restoration and enhancement.

## Monitoring

- Describe the project monitoring that will be implemented as part of this project including:

- List the questions the monitoring program is designed to answer.

Not Applicable - the proposed project does not include a monitoring component

- Describe any coordination with, or input from, the science community on monitoring and adaptive management that has occurred on the development of this nomination and what changes (if any) to the project were made as a result of this input.

Not Applicable - the proposed project does not include a monitoring component

- Describe the methods and strategies (i.e. monitoring, research, or both) that will be used to verify whether the project goals and objectives have been met? (*Note: A detailed monitoring plan and/or research plan is not required, however, enough detail must be provided to allow someone that is unfamiliar with the project to understand and evaluate the proposed methods and strategies.*)

Not Applicable - the proposed project does not include a monitoring component

- Describe whether the monitoring or research associated with this project fits into or is part of a larger monitoring or research program.

Not Applicable - the proposed project does not include a monitoring component

- Describe how information from the monitoring and/or research will be used to improve the continued performance of the proposed project or future similar projects.

Not Applicable - the proposed project does not include a monitoring component

## Attachments

- If applicable, include 8 ½ X 11 map depicting the project

## Appendix B-8

### LAKE TAHOE RESTORATION PROJECTS ESTIMATED NECESSARY EXPENSES & KEY MILESTONE DATES

Project Name:	SEZ Classification, Inventory, and General Condition Assessment	Agency:	U.S. Environmental Protection Agency
Prepared by:	Jacques Landy	Phone:	(775).589.5248
SNPLMA Project #:	None	EIP #:	498, 629, 640, 649, 650, 651, 652, 653, 667, 10139, 10151, 10162

#### Identify estimated costs of eligible reimbursement expenses:

<b>1. Planning, Environmental Assessment and Research Costs</b> (specialist surveys, reports, monitoring, data collection, analysis, NEPA, etc.)	\$ 0	0 %
<b>2. FWS Consultation – Endangered Species Act</b>	\$ 0	0 %
<b>3. Direct Labor (Payroll) to Perform the Project</b>	\$ 11,200	1.8 %
<b>4. Project Equipment</b> (tools, software, specialized equipment, etc.)	\$ 16,000	2.5 %
<b>5. Travel</b> (including per diem where official travel status required to carry out project, such as serve as COR, experts to review reports, etc.)	\$ 0	0 %
<b>6. Official Vehicle Use</b> (pro rata cost for use of Official Vehicles when required to carry out project)	\$ 0	0 %
<b>7. Cost of Contracts, Grants and/or Agreements to Perform the Project</b>	\$ 601,360	95.7 %
<b>8. Other Direct and Contracted Labor:</b> Agency payroll for the Contracting Officer to do project procurement, COR, Project Inspector, Sec. 106 Consultation if required, NEPA Lead, Project Manager, Project Supervisor, and subject experts to review contracted surveys, designs/drawings, plans, reports, etc.; Also covered is the cost to contract for a Project Manager and/or Project Supervisor if contracted separately from other project contracts)	\$ 0	0 %
<b>9. Other Necessary Expenses</b> (see Appendix B-9)	\$ 0	0 %
<b>TOTAL:</b>	\$ 628,560	100 %

#### Estimated Key Milestone Dates:

Milestones/Deliverables:	Date:
Preliminary SEZ Classification System	11/1/2011
Draft SEZ Classification Manual	10/01/2012
Final SEZ Classification Manual	12/01/2013
Draft SEZ Inventory and General Condition Assessment	12/1/2012
Final SEZ Inventory and General Condition Assessment	12/01/2013
<b>Final Completion Date:</b> 12/31/2013	

#### COMMENTS:

Milestones schedule based on the assumption that Round 11 funding would be released by November 2010 or earlier.